

Mobile application prototype for on-site information management in construction industry

Abstract:

Purpose-The purpose of this paper is to present the results of a study aimed at investigating the information requirements for broad use mobile applications for construction projects. It also presents the results of usability testing of a mobile application prototype for improving information management in construction projects. **Design/methodology/approach -** To achieve the research objectives, the information required to properly design the mobile application was collected by distributing an online questionnaire among construction professionals. Then a server-based application prototype was developed based on enterprise content management concepts. The mobile application was tested in a laboratory by setting a group of construction management postgraduate students who had experience of working in the construction industry. **Findings -** This study determines and ranks the critical on-site information artifacts, considered highly important from the perspective of clients, consultants, and contractors. The study also illustrates the development of a mobile application prototype and results of a usability test. The test results demonstrate that the application is well designed, user friendly, and meets user requirements. **Practical implications -** The results of this study are useful for developing a functional mobile application to manage on-site information in construction projects. **Originality/value -** The paper makes an original contribution by investigating information requirements of a mobile application for on-site information management.